Analytical and Quality Control Report

William Little
WTS
P.O. Box 363
Building 126 3RD Floor
WSMR, NM, 88002

Report Date: February 6, 2007

Work Order: 7011209

Project Name: HELSTF Groundwater Samples
Project Number: 7

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
113755	HLSF-0085-HMW-009-0107	water	2007-01-10	13:45	2007-01-10
113756	HLSF-0085-TB-803-0107	water	2007-01-10	13:45	2007-01-10

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Analytical Report

Sample: 113755 - HLSF-0085-HMW-009-0107

Analysis:	Ag, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	33986	Date Analyzed:	2007-01-25	Analyzed By:	RR
Prep Batch:	29250	Sample Preparation:	2007-01-16	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Silver		<0.00200	mg/L	1	0.00200

Sample: 113755 - HLSF-0085-HMW-009-0107

Analysis:	Ag, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	33924	Date Analyzed:	2007-01-24	Analyzed By:	RR
Prep Batch:	29246	Sample Preparation:	2007-01-16	Prepared By:	TS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Silver		<0.00200	mg/L	1	0.00200

Sample: 113755 - HLSF-0085-HMW-009-0107

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	33694	Date Analyzed:	2007-01-16	Analyzed By:	JG
Prep Batch:	29267	Sample Preparation:	2007-01-16	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		**118**	mg/L as CaCo3	1	4.00
Total Alkalinity		**118**	mg/L as CaCo3	1	4.00

Sample: 113755 - HLSF-0085-HMW-009-0107

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	33614	Date Analyzed:	2007-01-11	Analyzed By:	DR
Prep Batch:	29208	Sample Preparation:	2007-01-11	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		**11200**	µMHOS/cm	1	0.00

Sample: 113755 - HLSF-0085-HMW-009-0107

Analysis:	Cr, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	33986	Date Analyzed:	2007-01-25	Analyzed By:	RR
Prep Batch:	29250	Sample Preparation:	2007-01-16	Prepared By:	TS

Parameter	Flag	Result	RL Units	Dilution	RL
Dissolved Chromium		<0.00500	mg/L	1	0.00500

Sample: 113755 - HLSF-0085-HMW-009-0107

Analysis:	Cr, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	33924	Date Analyzed:	2007-01-24	Analyzed By:	RR
Prep Batch:	29246	Sample Preparation:	2007-01-16	Prepared By:	TS

Parameter	Flag	Result	RL Units	Dilution	RL
Total Chromium		**0.0110**	mg/L	1	0.00500

Sample: 113755 - HLSF-0085-HMW-009-0107

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	33868	Date Analyzed:	2007-01-11	Analyzed By:	JR
Prep Batch:	29418	Sample Preparation:	2007-01-11	Prepared By:	JR
QC Batch:	33898	Date Analyzed:	2007-01-22	Analyzed By:	JR
Prep Batch:	29443	Sample Preparation:	2007-01-22	Prepared By:	JR

Parameter	Flag	Result	RL Units	Dilution	RL
Bromide		<1.00	mg/L	5	0.200
Chloride		**1080**	mg/L	100	2.00
Fluoride		**2.57**	mg/L	5	0.200
Nitrite-N		<0.500	mg/L	5	0.100
Nitrate-N		**55.4**	mg/L	50	0.100
Sulfate		**5320**	mg/L	1	1.00

Sample: 113755 - HLSF-0085-HMW-009-0107

Analysis:	pH	Analytical Method:	SM 4500-H+	Prep Method:	N/A
QC Batch:	33697	Date Analyzed:	2007-01-11	Analyzed By:	DR
Prep Batch:	29270	Sample Preparation:	2007-01-11	Prepared By:	JR

Parameter	Flag	Result	RL Units	Dilution	RL
pH		**7.55**	s.u.	1	0.00

Sample: 113755 - HLSF-0085-HMW-009-0107

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	33675	Date Analyzed:	2007-01-12	Analyzed By:	JG
Prep Batch:	29252	Sample Preparation:	2007-01-12	Prepared By:	JR

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		**10400**	mg/L	1	5.00

Sample: 113755 - HLSF-0085-HMW-009-0107

Parameter	Flag	RL Result	Units	Dilution	RL
Total Organic Carbon		<1.00	mg/L	1	1.00

Sample: 113755 - HLSF-0085-HMW-009-0107

Analysis:	Volatiles WTS	Analytical Method:	S 8260B	Prep Method:	S 3510C
QC Batch:	33838	Date Analyzed:	2007-01-18	Analyzed By:	JG
Prep Batch:	29389	Sample Preparation:	2007-01-18	Prepared By:	JG

Parameter	Flag	RL Result	Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		<10.0	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		<1.00	µg/L	1	1.00
Methylene chloride		<5.00	µg/L	1	5.00
MTBE		<1.00	µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00	µg/L	1	1.00
1,1-Dichloroethane		<1.00	µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00	µg/L	1	1.00
2,2-Dichloropropane		<1.00	µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1.00
Chloroform		**7.12**	µg/L	1	1.00
1,1,1-Trichloroethane		<1.00	µg/L	1	1.00
1,1-Dichloropropene		<1.00	µg/L	1	1.00

continued . . .

sample 113755 continued . . .

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<1.00		µg/L	1	1.00
Carbon Tetrachloride		<1.00		µg/L	1	1.00
1,2-Dichloropropane		<1.00		µg/L	1	1.00
Trichloroethene (TCE)		<1.00		µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00		µg/L	1	1.00
Bromodichloromethane		<1.00		µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00		µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00		µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00		µg/L	1	1.00
Toluene		<1.00		µg/L	1	1.00
1,1,2-Trichloroethane		<1.00		µg/L	1	1.00
1,3-Dichloropropane		<1.00		µg/L	1	1.00
Dibromochloromethane		<1.00		µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00		µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00		µg/L	1	1.00
Chlorobenzene		<1.00		µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00		µg/L	1	1.00
Ethylbenzene		<1.00		µg/L	1	1.00
m,p-Xylene		<1.00		µg/L	1	1.00
Bromoform		<1.00		µg/L	1	1.00
Styrene		<1.00		µg/L	1	1.00
o-Xylene		<1.00		µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00		µg/L	1	1.00
2-Chlorotoluene		<1.00		µg/L	1	1.00
1,2,3-Trichloropropane		<1.00		µg/L	1	1.00
Isopropylbenzene		<1.00		µg/L	1	1.00
Bromobenzene		<1.00		µg/L	1	1.00
n-Propylbenzene		<1.00		µg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00		µg/L	1	1.00
tert-Butylbenzene		<1.00		µg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00		µg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00		µg/L	1	1.00
sec-Butylbenzene		<1.00		µg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00		µg/L	1	1.00
p-Isopropyltoluene		<1.00		µg/L	1	1.00
4-Chlorotoluene		<1.00		µg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00		µg/L	1	1.00
n-Butylbenzene		<1.00		µg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00		µg/L	1	5.00
1,2,3-Trichlorobenzene		<5.00		µg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00		µg/L	1	5.00
Naphthalene		<5.00		µg/L	1	5.00
Hexachlorobutadiene		<5.00		µg/L	1	5.00
Isopropyl Alcohol		<5.00		µg/L	1	5.00
Tert-butyl Alcohol		<5.00		µg/L	1	5.00
1,4-Dioxane		<5.00		µg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.8	µg/L	1	50.0	102	82.4 - 115
Toluene-d8		54.0	µg/L	1	50.0	108	89.7 - 108
4-Bromofluorobenzene (4-BFB)		48.2	µg/L	1	50.0	96	84.6 - 114

Sample: 113755 - HLSF-0085-HMW-009-0107

Analysis:	Zn, Dissolved	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	33986	Date Analyzed:	2007-01-25	Analyzed By:	RR
Prep Batch:	29250	Sample Preparation:	2007-01-16	Prepared By:	TS

Parameter	Flag	Result	RL Units	Dilution	RL
Dissolved Zinc		<0.00500	mg/L	1	0.00500

Sample: 113755 - HLSF-0085-HMW-009-0107

Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	33924	Date Analyzed:	2007-01-24	Analyzed By:	RR
Prep Batch:	29246	Sample Preparation:	2007-01-16	Prepared By:	TS

Parameter	Flag	Result	RL Units	Dilution	RL
Total Zinc		<0.00500	mg/L	1	0.00500

Sample: 113756 - HLSF-0085-TB-803-0107

Analysis:	Volatiles WTS	Analytical Method:	S 8260B	Prep Method:	S 3510C
QC Batch:	33838	Date Analyzed:	2007-01-18	Analyzed By:	JG
Prep Batch:	29389	Sample Preparation:	2007-01-18	Prepared By:	JG

Parameter	Flag	Result	RL Units	Dilution	RL
Bromochloromethane		<1.00	µg/L	1	1.00
Dichlorodifluoromethane		<1.00	µg/L	1	1.00
Chloromethane (methyl chloride)		<1.00	µg/L	1	1.00
Vinyl Chloride		<1.00	µg/L	1	1.00
Bromomethane (methyl bromide)		<5.00	µg/L	1	5.00
Chloroethane		<1.00	µg/L	1	1.00
Trichlorofluoromethane		<1.00	µg/L	1	1.00
Acetone		**16.5**	µg/L	1	10.0
Iodomethane (methyl iodide)		<5.00	µg/L	1	5.00
Carbon Disulfide		<1.00	µg/L	1	1.00
Acrylonitrile		<1.00	µg/L	1	1.00
2-Butanone (MEK)		<5.00	µg/L	1	5.00
4-Methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5.00
2-Hexanone		<5.00	µg/L	1	5.00
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10.0
1,1-Dichloroethene		<1.00	µg/L	1	1.00

continued . . .

sample 113756 continued . . .

Parameter	Flag	Result	RL	Units	Dilution	RL
Methylene chloride		<5.00		µg/L	1	5.00
MTBE		<1.00		µg/L	1	1.00
trans-1,2-Dichloroethene		<1.00		µg/L	1	1.00
1,1-Dichloroethane		<1.00		µg/L	1	1.00
cis-1,2-Dichloroethene		<1.00		µg/L	1	1.00
2,2-Dichloropropane		<1.00		µg/L	1	1.00
1,2-Dichloroethane (EDC)		<1.00		µg/L	1	1.00
Chloroform		<1.00		µg/L	1	1.00
1,1,1-Trichloroethane		<1.00		µg/L	1	1.00
1,1-Dichloropropene		<1.00		µg/L	1	1.00
Benzene		<1.00		µg/L	1	1.00
Carbon Tetrachloride		<1.00		µg/L	1	1.00
1,2-Dichloropropane		<1.00		µg/L	1	1.00
Trichloroethene (TCE)		<1.00		µg/L	1	1.00
Dibromomethane (methylene bromide)		<1.00		µg/L	1	1.00
Bromodichloromethane		<1.00		µg/L	1	1.00
2-Chloroethyl vinyl ether		<5.00		µg/L	1	5.00
cis-1,3-Dichloropropene		<1.00		µg/L	1	1.00
trans-1,3-Dichloropropene		<1.00		µg/L	1	1.00
Toluene		<1.00		µg/L	1	1.00
1,1,2-Trichloroethane		<1.00		µg/L	1	1.00
1,3-Dichloropropane		<1.00		µg/L	1	1.00
Dibromochloromethane		<1.00		µg/L	1	1.00
1,2-Dibromoethane (EDB)		<1.00		µg/L	1	1.00
Tetrachloroethene (PCE)		<1.00		µg/L	1	1.00
Chlorobenzene		<1.00		µg/L	1	1.00
1,1,1,2-Tetrachloroethane		<1.00		µg/L	1	1.00
Ethylbenzene		<1.00		µg/L	1	1.00
m,p-Xylene		<1.00		µg/L	1	1.00
Bromoform		<1.00		µg/L	1	1.00
Styrene		<1.00		µg/L	1	1.00
o-Xylene		<1.00		µg/L	1	1.00
1,1,2,2-Tetrachloroethane		<1.00		µg/L	1	1.00
2-Chlorotoluene		<1.00		µg/L	1	1.00
1,2,3-Trichloropropane		<1.00		µg/L	1	1.00
Isopropylbenzene		<1.00		µg/L	1	1.00
Bromobenzene		<1.00		µg/L	1	1.00
n-Propylbenzene		<1.00		µg/L	1	1.00
1,3,5-Trimethylbenzene		<1.00		µg/L	1	1.00
tert-Butylbenzene		<1.00		µg/L	1	1.00
1,2,4-Trimethylbenzene		<1.00		µg/L	1	1.00
1,4-Dichlorobenzene (para)		<1.00		µg/L	1	1.00
sec-Butylbenzene		<1.00		µg/L	1	1.00
1,3-Dichlorobenzene (meta)		<1.00		µg/L	1	1.00
p-Isopropyltoluene		<1.00		µg/L	1	1.00
4-Chlorotoluene		<1.00		µg/L	1	1.00
1,2-Dichlorobenzene (ortho)		<1.00		µg/L	1	1.00
n-Butylbenzene		<1.00		µg/L	1	1.00
1,2-Dibromo-3-chloropropane		<5.00		µg/L	1	5.00

continued . . .

sample 113756 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5.00
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5.00
Naphthalene		<5.00	µg/L	1	5.00
Hexachlorobutadiene		<5.00	µg/L	1	5.00
Isopropyl Alcohol	[1]	**270**	µg/L	1	5.00
Tert-butyl Alcohol		**25.5**	µg/L	1	5.00
1,4-Dioxane		<5.00	µg/L	1	5.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.2	µg/L	1	50.0	106	82.4 - 115
Toluene-d8		53.3	µg/L	1	50.0	107	89.7 - 108
4-Bromofluorobenzene (4-BFB)		47.8	µg/L	1	50.0	96	84.6 - 114

Method Blank (1) QC Batch: 33614

QC Batch: 33614 | Date Analyzed: 2007-01-11 | Analyzed By: DR
Prep Batch: 29208 | QC Preparation: 2007-01-11 | Prepared By: DR

Parameter	Flag	MDL Result	Units	RL
Specific Conductance		0.00	µMHOS/cm	

Method Blank (1) QC Batch: 33675

QC Batch: 33675 | Date Analyzed: 2007-01-12 | Analyzed By: JG
Prep Batch: 29252 | QC Preparation: 2007-01-12 | Prepared By: JG

Parameter	Flag	MDL Result	Units	RL
Total Dissolved Solids		<5.00	mg/L	5

Method Blank (1) QC Batch: 33694

QC Batch: 33694 | Date Analyzed: 2007-01-16 | Analyzed By: JG
Prep Batch: 29267 | QC Preparation: 2007-01-16 | Prepared By: JG

Parameter	Flag	MDL Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<2.38	mg/L as CaCo3	4

[1] Estimated concentration value greater than standard range.

Method Blank (1) QC Batch: 33838

QC Batch: 33838 Date Analyzed: 2007-01-18 Analyzed By: JG
Prep Batch: 29389 QC Preparation: 2007-01-18 Prepared By: JG

Parameter	Flag	MDL Result	Units	RL
Bromochloromethane		<0.0699	µg/L	1
Dichlorodifluoromethane		<0.0598	µg/L	1
Chloromethane (methyl chloride)		<0.230	µg/L	1
Vinyl Chloride		<0.0902	µg/L	1
Bromomethane (methyl bromide)		<0.740	µg/L	5
Chloroethane		<0.195	µg/L	1
Trichlorofluoromethane		<0.160	µg/L	1
Acetone		<0.854	µg/L	10
Iodomethane (methyl iodide)		<0.112	µg/L	5
Carbon Disulfide		<0.0764	µg/L	1
Acrylonitrile		<0.184	µg/L	1
2-Butanone (MEK)		<0.394	µg/L	5
4-Methyl-2-pentanone (MIBK)		<0.484	µg/L	5
2-Hexanone		<0.0975	µg/L	5
trans 1,4-Dichloro-2-butene		<0.420	µg/L	10
1,1-Dichloroethene		<0.0736	µg/L	1
Methylene chloride		<0.689	µg/L	5
MTBE		<0.0504	µg/L	1
trans-1,2-Dichloroethene		<0.0598	µg/L	1
1,1-Dichloroethane		<0.0299	µg/L	1
cis-1,2-Dichloroethene		<0.101	µg/L	1
2,2-Dichloropropane		<0.0665	µg/L	1
1,2-Dichloroethane (EDC)		<0.0557	µg/L	1
Chloroform		<0.0475	µg/L	1
1,1,1-Trichloroethane		<0.0846	µg/L	1
1,1-Dichloropropene		<0.0423	µg/L	1
Benzene		<0.0495	µg/L	1
Carbon Tetrachloride		<0.121	µg/L	1
1,2-Dichloropropane		<0.0933	µg/L	1
Trichloroethene (TCE)		<0.0495	µg/L	1
Dibromomethane (methylene bromide)		<0.0640	µg/L	1
Bromodichloromethane		<0.0651	µg/L	1
2-Chloroethyl vinyl ether		<0.0905	µg/L	5
cis-1,3-Dichloropropene		<0.0640	µg/L	1
trans-1,3-Dichloropropene		<0.0504	µg/L	1
Toluene		0.260	µg/L	1
1,1,2-Trichloroethane		<0.106	µg/L	1
1,3-Dichloropropane		<0.0625	µg/L	1
Dibromochloromethane		<0.0791	µg/L	1
1,2-Dibromoethane (EDB)		<0.0460	µg/L	1
Tetrachloroethene (PCE)		<0.0696	µg/L	1
Chlorobenzene		0.0400	µg/L	1
1,1,1,2-Tetrachloroethane		<0.125	µg/L	1
Ethylbenzene		0.0700	µg/L	1
m,p-Xylene		0.130	µg/L	1
Bromoform		<0.0859	µg/L	1
Styrene		0.0400	µg/L	1

continued . . .

method blank continued . . .

Parameter	Flag	MDL Result	Units	RL
o-Xylene		<0.0505	µg/L	1
1,1,2,2-Tetrachloroethane		<0.0672	µg/L	1
2-Chlorotoluene		<0.0283	µg/L	1
1,2,3-Trichloropropane		<0.0679	µg/L	1
Isopropylbenzene		<0.0406	µg/L	1
Bromobenzene		<0.103	µg/L	1
n-Propylbenzene		<0.0423	µg/L	1
1,3,5-Trimethylbenzene		<0.0557	µg/L	1
tert-Butylbenzene		<0.0770	µg/L	1
1,2,4-Trimethylbenzene		<0.0336	µg/L	1
1,4-Dichlorobenzene (para)		<0.0672	µg/L	1
sec-Butylbenzene		<0.0439	µg/L	1
1,3-Dichlorobenzene (meta)		<0.0672	µg/L	1
p-Isopropyltoluene		<0.0513	µg/L	1
4-Chlorotoluene		<0.0460	µg/L	1
1,2-Dichlorobenzene (ortho)		<0.0629	µg/L	1
n-Butylbenzene		<0.0400	µg/L	1
1,2-Dibromo-3-chloropropane		<0.538	µg/L	5
1,2,3-Trichlorobenzene		<0.504	µg/L	5
1,2,4-Trichlorobenzene		<0.166	µg/L	5
Naphthalene		2.41	µg/L	5
Hexachlorobutadiene		1.19	µg/L	5
Isopropyl Alcohol		<5.00	µg/L	5
Tert-butyl Alcohol		<5.00	µg/L	5
1,4-Dioxane		<5.00	µg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.0	µg/L	1	50.0	102	82.4 - 115
Toluene-d8	[2]	54.7	µg/L	1	50.0	109	89.7 - 108
4-Bromofluorobenzene (4-BFB)		47.1	µg/L	1	50.0	94	84.6 - 114

Method Blank (1) QC Batch: 33868

QC Batch: 33868 | Date Analyzed: 2007-01-11 | Analyzed By: JR
Prep Batch: 29418 | QC Preparation: 2007-01-11 | Prepared By: JR

Parameter	Flag	MDL Result	Units	RL
Bromide		<0.0217	mg/L	0.2
Chloride		<0.0257	mg/L	2
Fluoride		<0.0168	mg/L	0.2
Nitrite-N		<0.0168	mg/L	0.1
Nitrate-N		<0.0168	mg/L	0.1

[2] 8260 Only - One surrogate is out of control limits. The other two surrogates show the sample preperation was performed properly.

Method Blank (1) QC Batch: 33898

QC Batch:	33898	Date Analyzed:	2007-01-22	Analyzed By:	JR
Prep Batch:	29443	QC Preparation:	2007-01-22	Prepared By:	JR

Parameter	Flag	MDL Result	Units	RL
Sulfate		<0.0598	mg/L	1

Method Blank (1) QC Batch: 33924

QC Batch:	33924	Date Analyzed:	2007-01-24	Analyzed By:	RR
Prep Batch:	29246	QC Preparation:	2007-01-16	Prepared By:	TS

Parameter	Flag	MDL Result	Units	RL
Total Silver		<0.000274	mg/L	0.002

Method Blank (1) QC Batch: 33924

QC Batch:	33924	Date Analyzed:	2007-01-24	Analyzed By:	RR
Prep Batch:	29246	QC Preparation:	2007-01-16	Prepared By:	TS

Parameter	Flag	MDL Result	Units	RL
Total Chromium		<0.00357	mg/L	0.005

Method Blank (1) QC Batch: 33924

QC Batch:	33924	Date Analyzed:	2007-01-24	Analyzed By:	RR
Prep Batch:	29246	QC Preparation:	2007-01-16	Prepared By:	TS

Parameter	Flag	MDL Result	Units	RL
Total Zinc		<0.000666	mg/L	0.005

Method Blank (1) QC Batch: 33986

QC Batch:	33986	Date Analyzed:	2007-01-25	Analyzed By:	RR
Prep Batch:	29250	QC Preparation:	2007-01-16	Prepared By:	TS

Parameter	Flag	MDL Result	Units	RL
Dissolved Silver		<0.000199	mg/L	0.002

Method Blank (1) QC Batch: 33986

QC Batch: 33986 Date Analyzed: 2007-01-25 Analyzed By: RR
Prep Batch: 29250 QC Preparation: 2007-01-16 Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Dissolved Chromium		<0.00357	mg/L	0.005

Method Blank (1) QC Batch: 33986

QC Batch: 33986 Date Analyzed: 2007-01-25 Analyzed By: RR
Prep Batch: 29250 QC Preparation: 2007-01-16 Prepared By: TS

Parameter	Flag	MDL Result	Units	RL
Dissolved Zinc		<0.00300	mg/L	0.005

Method Blank (1) QC Batch: 34014

QC Batch: 34014 Date Analyzed: Analyzed By:
Prep Batch: QC Preparation: Prepared By:

Parameter	Flag	MDL Result	Units	RL
Total Organic Carbon		<0.382	mg/L	1

Duplicates (1)

QC Batch: 33614 Date Analyzed: 2007-01-11 Analyzed By: DR
Prep Batch: 29208 QC Preparation: 2007-01-11 Prepared By: DR

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	12200	12200	µMHOS/cm	1	0	6.7

Duplicates (1)

QC Batch: 33675 Date Analyzed: 2007-01-12 Analyzed By: JG
Prep Batch: 29252 QC Preparation: 2007-01-12 Prepared By: JG

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	9790	10500	mg/L	1	7	20

Duplicates (1)

QC Batch: 33694 Date Analyzed: 2007-01-16 Analyzed By: JG
Prep Batch: 29267 QC Preparation: 2007-01-16 Prepared By: JG

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	6.3
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	6.3
Bicarbonate Alkalinity	206	202	mg/L as CaCo3	1	2	6.3
Total Alkalinity	206	202	mg/L as CaCo3	1	2	6.3

Duplicates (1)

QC Batch: 33697 Date Analyzed: 2007-01-11 Analyzed By: DR
Prep Batch: 29270 QC Preparation: 2007-01-11 Prepared By: DR

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH	7.52	7.52	s.u.	1	0	20

Laboratory Control Spike (LCS-1)

QC Batch: 33838 Date Analyzed: 2007-01-18 Analyzed By: JG
Prep Batch: 29389 QC Preparation: 2007-01-18 Prepared By: JG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
1,1-Dichloroethene	53.2	µg/L	1	50.0	<0.0736	106	83.4 - 114
Benzene	50.7	µg/L	1	50.0	<0.0495	101	83.5 - 115
Trichloroethene (TCE)	50.1	µg/L	1	50.0	<0.0495	100	91.3 - 111
Toluene	47.8	µg/L	1	50.0	<0.0736	96	82 - 110
Chlorobenzene	50.0	µg/L	1	50.0	<0.0217	100	87.9 - 109

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
1,1-Dichloroethene	51.8	µg/L	1	50.0	<0.0736	104	83.4 - 114	3	20
Benzene	50.3	µg/L	1	50.0	<0.0495	101	83.5 - 115	1	20
Trichloroethene (TCE)	49.5	µg/L	1	50.0	<0.0495	99	91.3 - 111	1	20
Toluene	47.2	µg/L	1	50.0	<0.0736	94	82 - 110	1	20
Chlorobenzene	49.6	µg/L	1	50.0	<0.0217	99	87.9 - 109	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Dibromofluoromethane	51.0	51.3	µg/L	1	50.0	102	103	82.4 - 115
Toluene-d8	50.9	51.7	µg/L	1	50.0	102	103	89.7 - 108
4-Bromofluorobenzene (4-BFB)	51.2	51.2	µg/L	1	50.0	102	102	84.6 - 114

Laboratory Control Spike (LCS-1)

QC Batch: 33868 | Date Analyzed: 2007-01-11 | Analyzed By: JR
Prep Batch: 29418 | QC Preparation: 2007-01-11 | Prepared By: JR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromide	2.49	mg/L	1	2.50	<0.0217	100	90 - 110
Chloride	12.2	mg/L	1	12.5	<0.0257	98	90 - 110
Fluoride	2.53	mg/L	1	2.50	<0.0168	101	88.6 - 107
Nitrite-N	2.52	mg/L	1	2.50	<0.0168	101	90 - 110
Nitrate-N	2.51	mg/L	1	2.50	<0.0168	100	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromide	2.49	mg/L	1	2.50	<0.0217	100	90 - 110	0	20
Chloride	12.2	mg/L	1	12.5	<0.0257	98	90 - 110	0	20
Fluoride	2.52	mg/L	1	2.50	<0.0168	101	88.6 - 107	0	20
Nitrite-N	2.52	mg/L	1	2.50	<0.0168	101	90 - 110	0	20
Nitrate-N	2.52	mg/L	1	2.50	<0.0168	101	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 33898 | Date Analyzed: 2007-01-22 | Analyzed By: JR
Prep Batch: 29443 | QC Preparation: 2007-01-22 | Prepared By: JR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Sulfate	12.6	mg/L	1	12.5	<0.0598	101	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Sulfate	12.6	mg/L	1	12.5	<0.0598	101	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 33924 | Date Analyzed: 2007-01-24 | Analyzed By: RR
Prep Batch: 29246 | QC Preparation: 2007-01-16 | Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver	0.124	mg/L	1	0.125	<0.000274	99	87.9 - 111

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Silver	0.122	mg/L	1	0.125	<0.000274	98	87.9 - 111	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 33924 Date Analyzed: 2007-01-24 Analyzed By: RR
Prep Batch: 29246 QC Preparation: 2007-01-16 Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Chromium	0.106	mg/L	1	0.100	<0.00357	106	86.5 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Chromium	0.110	mg/L	1	0.100	<0.00357	110	86.5 - 115	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 33924 Date Analyzed: 2007-01-24 Analyzed By: RR
Prep Batch: 29246 QC Preparation: 2007-01-16 Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Zinc	0.242	mg/L	1	0.250	<0.000666	97	82.9 - 109

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Zinc	0.242	mg/L	1	0.250	<0.000666	97	82.9 - 109	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 33986 Date Analyzed: 2007-01-25 Analyzed By: RR
Prep Batch: 29250 QC Preparation: 2007-01-16 Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Silver	0.121	mg/L	1	0.125	<0.000199	97	86.2 - 116

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Silver	0.122	mg/L	1	0.125	<0.000199	98	86.2 - 116	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 33986 | Date Analyzed: 2007-01-25 | Analyzed By: RR
Prep Batch: 29250 | QC Preparation: 2007-01-16 | Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Chromium	0.102	mg/L	1	0.100	<0.00357	102	83 - 112

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Chromium	0.0980	mg/L	1	0.100	<0.00357	98	83 - 112	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 33986 | Date Analyzed: 2007-01-25 | Analyzed By: RR
Prep Batch: 29250 | QC Preparation: 2007-01-16 | Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Zinc	0.228	mg/L	1	0.250	<0.00300	91	84.7 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Zinc	0.233	mg/L	1	0.250	<0.00300	93	84.7 - 113	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 34014 | Date Analyzed: | Analyzed By:
Prep Batch: | QC Preparation: | Prepared By:

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Organic Carbon	5.60	mg/L	1	5.00	<0.382	112	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Organic Carbon	5.25	mg/L	1	5.00	<0.382	105	70 - 130	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 113757

QC Batch: 33838 | Date Analyzed: 2007-01-18 | Analyzed By: JG
Prep Batch: 29389 | QC Preparation: 2007-01-18 | Prepared By: JG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
1,1-Dichloroethene	53.2	µg/L	1	50.0	<0.0736	106	78.7 - 119
Benzene	50.1	µg/L	1	50.0	<0.0495	100	75.8 - 125
Trichloroethene (TCE)	49.1	µg/L	1	50.0	<0.0495	98	83.6 - 112
Toluene	46.8	µg/L	1	50.0	<0.0736	94	81.6 - 115
Chlorobenzene	48.7	µg/L	1	50.0	<0.0217	97	83.9 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
1,1-Dichloroethene	53.4	µg/L	1	50.0	<0.0736	107	78.7 - 119	0	20
Benzene	49.9	µg/L	1	50.0	<0.0495	100	75.8 - 125	0	20
Trichloroethene (TCE)	49.2	µg/L	1	50.0	<0.0495	98	83.6 - 112	0	20
Toluene	46.4	µg/L	1	50.0	<0.0736	93	81.6 - 115	1	20
Chlorobenzene	49.2	µg/L	1	50.0	<0.0217	98	83.9 - 113	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Dibromofluoromethane	51.6	51.6	µg/L	1	50	103	103	86.6 - 114
Toluene-d8	51.0	50.5	µg/L	1	50	102	101	91 - 109
4-Bromofluorobenzene (4-BFB)	50.4	50.7	µg/L	1	50	101	101	87.2 - 113

Matrix Spike (MS-1) Spiked Sample: 113757

QC Batch: 33868 Date Analyzed: 2007-01-11 Analyzed By: JR
Prep Batch: 29418 QC Preparation: 2007-01-11 Prepared By: JR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Bromide	126	mg/L	50	125	<1.08	101	90 - 110
Chloride	2940	mg/L	50	625	2310	101	90 - 110
Fluoride	128	mg/L	50	125	<0.840	102	89.9 - 104
Nitrite-N	124	mg/L	50	125	<0.840	99	90 - 110
Nitrate-N	212	mg/L	50	125	90.6	97	78.6 - 105

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Bromide	126	mg/L	50	125	<1.08	101	90 - 110	0	20
Chloride	2950	mg/L	50	625	2310	102	90 - 110	0	20
Fluoride	129	mg/L	50	125	<0.840	103	89.9 - 104	1	20
Nitrite-N	126	mg/L	50	125	<0.840	101	90 - 110	2	20
Nitrate-N	212	mg/L	50	125	90.6	97	78.6 - 105	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 113757

QC Batch: 33898 Date Analyzed: 2007-01-22 Analyzed By: JR
Prep Batch: 29443 QC Preparation: 2007-01-22 Prepared By: JR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Sulfate	10200	mg/L	500	6250	4224	96	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Sulfate	10200	mg/L	500	6250	4224	96	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 113753

QC Batch: 33924 | Date Analyzed: 2007-01-24 | Analyzed By: RR
Prep Batch: 29246 | QC Preparation: 2007-01-16 | Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver	0.115	mg/L	1	0.125	<0.000274	92	88.2 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Silver	0.117	mg/L	1	0.125	<0.000274	94	88.2 - 114	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 113753

QC Batch: 33924 | Date Analyzed: 2007-01-24 | Analyzed By: RR
Prep Batch: 29246 | QC Preparation: 2007-01-16 | Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Chromium	0.0750	mg/L	1	0.100	<0.00357	75	69.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Chromium	0.0790	mg/L	1	0.100	<0.00357	79	69.2 - 129	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 113753

QC Batch: 33924 | Date Analyzed: 2007-01-24 | Analyzed By: RR
Prep Batch: 29246 | QC Preparation: 2007-01-16 | Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Zinc	0.195	mg/L	1	0.250	0.005	76	75.5 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Zinc	0.201	mg/L	1	0.250	0.005	78	75.5 - 113	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-2) Spiked Sample: 113751

QC Batch: 33924 Date Analyzed: 2007-01-24 Analyzed By: RR
Prep Batch: 29246 QC Preparation: 2007-01-16 Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Silver	0.118	mg/L	1	0.125	<0.000274	94	88.2 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Silver	0.120	mg/L	1	0.125	<0.000274	96	88.2 - 114	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-2) Spiked Sample: 113751

QC Batch: 33924 Date Analyzed: 2007-01-24 Analyzed By: RR
Prep Batch: 29246 QC Preparation: 2007-01-16 Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Chromium	0.0920	mg/L	1	0.100	<0.00357	92	69.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Chromium	0.0930	mg/L	1	0.100	<0.00357	93	69.2 - 129	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-2) Spiked Sample: 113751

QC Batch: 33924 Date Analyzed: 2007-01-24 Analyzed By: RR
Prep Batch: 29246 QC Preparation: 2007-01-16 Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Zinc	0.223	mg/L	1	0.250	<0.000666	89	75.5 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Zinc	0.231	mg/L	1	0.250	<0.000666	92	75.5 - 113	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 113753

QC Batch: 33986 | Date Analyzed: 2007-01-25 | Analyzed By: RR
Prep Batch: 29250 | QC Preparation: 2007-01-16 | Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Silver	0.116	mg/L	1	0.125	<0.000199	93	90.1 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Silver	0.116	mg/L	1	0.125	<0.000199	93	90.1 - 120	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 113753

QC Batch: 33986 | Date Analyzed: 2007-01-25 | Analyzed By: RR
Prep Batch: 29250 | QC Preparation: 2007-01-16 | Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Chromium	0.0860	mg/L	1	0.100	<0.00357	86	75 - 121

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Chromium	0.0860	mg/L	1	0.100	<0.00357	86	75 - 121	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 113753

QC Batch: 33986 | Date Analyzed: 2007-01-25 | Analyzed By: RR
Prep Batch: 29250 | QC Preparation: 2007-01-16 | Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Zinc	0.239	mg/L	1	0.250	<0.00300	96	80.4 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Zinc	0.241	mg/L	1	0.250	<0.00300	96	80.4 - 120	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-2) Spiked Sample: 113751

QC Batch: 33986 | Date Analyzed: 2007-01-25 | Analyzed By: RR
Prep Batch: 29250 | QC Preparation: 2007-01-16 | Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Silver	0.115	mg/L	1	0.125	<0.000199	92	90.1 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Silver	0.115	mg/L	1	0.125	<0.000199	92	90.1 - 120	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-2) Spiked Sample: 113751

QC Batch: 33986
Prep Batch: 29250
Date Analyzed: 2007-01-25
QC Preparation: 2007-01-16
Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Chromium	0.0910	mg/L	1	0.100	<0.00357	91	75 - 121

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Chromium	0.0890	mg/L	1	0.100	<0.00357	89	75 - 121	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-2) Spiked Sample: 113751

QC Batch: 33986
Prep Batch: 29250
Date Analyzed: 2007-01-25
QC Preparation: 2007-01-16
Analyzed By: RR
Prepared By: TS

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Zinc	0.234	mg/L	1	0.250	<0.00300	94	80.4 - 120

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Zinc	0.227	mg/L	1	0.250	<0.00300	91	80.4 - 120	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 113761

QC Batch: 34014
Prep Batch:
Date Analyzed:
QC Preparation:
Analyzed By:
Prepared By:

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Organic Carbon	4.96	mg/L	1	5.00	<0.382	99	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Organic Carbon	[3]	9.94	mg/L	1	5.00	<0.382	199	70 - 130	67	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 33614 Date Analyzed: 2007-01-11 Analyzed By: DR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		µMHOS/cm	1410	1410	100	96.7 - 108	2007-01-11

Standard (CCV-1)

QC Batch: 33614 Date Analyzed: 2007-01-11 Analyzed By: DR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		µMHOS/cm	1410	1410	100	96.7 - 108	2007-01-11

Standard (ICV-1)

QC Batch: 33675 Date Analyzed: 2007-01-12 Analyzed By: JG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1010	101	94.4 - 106	2007-01-12

Standard (CCV-1)

QC Batch: 33675 Date Analyzed: 2007-01-12 Analyzed By: JG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	992	99	94.4 - 106	2007-01-12

Standard (ICV-1)

QC Batch: 33694 Date Analyzed: 2007-01-16 Analyzed By: JG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0.00	<1.00		0 - 105	2007-01-16

continued . . .

[3]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

standard continued . . .

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Carbonate Alkalinity		mg/L as CaCo3	0.00	236		0 - 105	2007-01-16
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	8.00		0 - 105	2007-01-16
Total Alkalinity		mg/L as CaCo3	250	244	98	93.7 - 99.9	2007-01-16

Standard (CCV-1)

QC Batch: 33694 Date Analyzed: 2007-01-16 Analyzed By: JG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0.00	<1.00		0 - 105	2007-01-16
Carbonate Alkalinity		mg/L as CaCo3	0.00	236		0 - 105	2007-01-16
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	14.0		0 - 105	2007-01-16
Total Alkalinity		mg/L as CaCo3	250	250	100	93.7 - 99.9	2007-01-16

Standard (ICV-1)

QC Batch: 33697 Date Analyzed: 2007-01-11 Analyzed By: DR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	6.97	100	98.8 - 101	2007-01-11

Standard (CCV-1)

QC Batch: 33697 Date Analyzed: 2007-01-11 Analyzed By: DR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.02	100	98.8 - 101	2007-01-11

Standard (CCV-1)

QC Batch: 33838 Date Analyzed: 2007-01-18 Analyzed By: JG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	51.9	104	80 - 120	2007-01-18
1,1-Dichloroethene		µg/L	50.0	52.5	105	80 - 120	2007-01-18
Chloroform		µg/L	50.0	51.8	104	80 - 120	2007-01-18
1,2-Dichloropropane		µg/L	50.0	51.1	102	80 - 120	2007-01-18
Toluene		µg/L	50.0	46.2	92	80 - 120	2007-01-18
Chlorobenzene		µg/L	50.0	49.3	99	80 - 120	2007-01-18

continued . . .

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ethylbenzene		µg/L	50.0	52.3	105	80 - 120	2007-01-18

Standard (CCV-2)

QC Batch: 33838 Date Analyzed: 2007-01-18 Analyzed By: JG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	50.0	52.7	105	80 - 120	2007-01-18
1,1-Dichloroethene		µg/L	50.0	51.5	103	80 - 120	2007-01-18
Chloroform		µg/L	50.0	49.7	99	80 - 120	2007-01-18
1,2-Dichloropropane		µg/L	50.0	51.1	102	80 - 120	2007-01-18
Toluene		µg/L	50.0	45.9	92	80 - 120	2007-01-18
Chlorobenzene		µg/L	50.0	48.1	96	80 - 120	2007-01-18
Ethylbenzene		µg/L	50.0	50.4	101	80 - 120	2007-01-18

Standard (ICV-1)

QC Batch: 33868 Date Analyzed: 2007-01-11 Analyzed By: JR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.41	96	93.2 - 98.5	2007-01-11
Chloride		mg/L	12.5	11.8	94	90 - 110	2007-01-11
Fluoride		mg/L	2.50	2.43	97	90 - 110	2007-01-11
Nitrite-N		mg/L	2.50	2.41	96	90 - 110	2007-01-11
Nitrate-N		mg/L	2.50	2.35	94	90 - 110	2007-01-11

Standard (CCV-1)

QC Batch: 33868 Date Analyzed: 2007-01-11 Analyzed By: JR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.48	99	93.2 - 98.5	2007-01-11
Chloride		mg/L	12.5	12.1	97	90 - 110	2007-01-11
Fluoride		mg/L	2.50	2.49	100	90 - 110	2007-01-11
Nitrite-N		mg/L	2.50	2.46	98	90 - 110	2007-01-11
Nitrate-N		mg/L	2.50	2.40	96	90 - 110	2007-01-11

Standard (ICV-1)

QC Batch: 33898 Date Analyzed: 2007-01-22 Analyzed By: JR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Sulfate		mg/L	12.5	11.8	94	90 - 110	2007-01-22

Standard (CCV-1)

QC Batch: 33898 Date Analyzed: 2007-01-22 Analyzed By: JR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Sulfate		mg/L	12.5	12.1	97	90 - 110	2007-01-22

Standard (ICV-1)

QC Batch: 33924 Date Analyzed: 2007-01-24 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.123	98	90 - 110	2007-01-24

Standard (ICV-1)

QC Batch: 33924 Date Analyzed: 2007-01-24 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Chromium		mg/L	1.00	0.966	97	90 - 110	2007-01-24

Standard (ICV-1)

QC Batch: 33924 Date Analyzed: 2007-01-24 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Zinc		mg/L	1.00	1.02	102	90 - 110	2007-01-24

Standard (CCV-1)

QC Batch: 33924 Date Analyzed: 2007-01-24 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Silver		mg/L	0.125	0.136	109	90 - 110	2007-01-24

Standard (CCV-1)

QC Batch: 33924 Date Analyzed: 2007-01-24 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Chromium		mg/L	1.00	1.06	106	90 - 110	2007-01-24

Standard (CCV-1)

QC Batch: 33924 Date Analyzed: 2007-01-24 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Zinc		mg/L	1.00	1.04	104	90 - 110	2007-01-24

Standard (ICV-1)

QC Batch: 33986 Date Analyzed: 2007-01-25 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.125	100	90 - 110	2007-01-25

Standard (ICV-1)

QC Batch: 33986 Date Analyzed: 2007-01-25 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Chromium		mg/L	1.00	0.956	96	90 - 110	2007-01-25

Standard (ICV-1)

QC Batch: 33986 Date Analyzed: 2007-01-25 Analyzed By: RR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Zinc		mg/L	1.00	1.02	102	90 - 110	2007-01-25

Standard (CCV-1)

QC Batch: 33986 Date Analyzed: 2007-01-25 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Silver		mg/L	0.125	0.126	101	90 - 110	2007-01-25

Standard (CCV-1)

QC Batch: 33986 Date Analyzed: 2007-01-25 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Chromium		mg/L	1.00	1.05	105	90 - 110	2007-01-25

Standard (CCV-1)

QC Batch: 33986 Date Analyzed: 2007-01-25 Analyzed By: RR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Zinc		mg/L	1.00	1.08	108	90 - 110	2007-01-25

Standard (ICV-1)

QC Batch: 34014 Date Analyzed: Analyzed By:

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.99	100	80 - 120	2007-01-26

Standard (CCV-1)

QC Batch: 34014 Date Analyzed: Analyzed By:

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5.00	4.95	99	80 - 120	2007-01-26